

KenVision for Fuel Retail Outlet Monitoring

AI Video Analytics Use Cases

Smarter Fuel Stations. Safer Operations. Better Control.

KenVision is an AI-powered video analytics platform designed for fuel retail outlets and forecourt operations. It transforms existing CCTV infrastructure into a real-time operational intelligence and security platform — helping fuel retailers reduce losses, improve safety, strengthen compliance, and optimize customer experience.

KenVision enables fuel station operators to monitor forecourt operations, detect suspicious activities, manage queues, strengthen site security, and improve staff accountability — all through intelligent video analytics using existing camera infrastructure without requiring additional hardware.

1. Drive-Off Detection

Monitors fuel dispensing activity and vehicle movement in real time to identify vehicles leaving without payment.

- Detects incomplete payment events
- Captures bay number, timestamp, and tagged video clips
- Sends instant alerts to managers and supervisors
- Supports vehicle identification and evidence collection

Outcome: Recoverable losses, real-time evidence, and repeat offender deterrence.

2. Forecourt & Pump Bay Monitoring

Tracks fueling activity, nozzle usage, and vehicle dwell time across every pump bay.

- Detects dispenser tampering and nozzle misuse
- Monitors unusual fueling durations and fuel activity patterns
- Generates alerts for suspicious operational behavior

Outcome: Early tampering detection and reduced financial loss.

3. After-Hours Intrusion Detection

Monitors forecourt zones, fuel storage, and perimeter areas outside operating hours.

- Detects unauthorized movement during closed hours
- Sends real-time intrusion alerts
- Saves timestamped and tagged video evidence automatically

Outcome: Faster response, stronger evidence, and improved insurance support.

4. Convenience Store Monitoring

Tracks shopper movement, queue lengths, and suspicious behavior inside the retail store.

- Monitors dwell time near high-value products
- Detects unusual shopper behavior patterns
- Helps optimize store layouts and reduce shrinkage

Outcome: Lower losses and improved retail operations.

5. Queue Management

Detects queue buildup at billing counters and alerts staff to reduce customer wait times.

- Monitors queue lengths in real time
- Sends alerts when thresholds are exceeded
- Provides reports for peak-hour staffing optimization

Outcome: Better customer experience and increased store revenue.

6. Staff Coverage & Shift Monitoring

Tracks staff deployment and movement across the forecourt, store, and operational zones.

- Detects unattended operational areas
- Identifies coverage gaps and shift compliance issues
- Generates daily operational coverage reports

Outcome: Improved accountability and safer operations.

7. Restricted Zone Access Monitoring

Monitors sensitive areas such as fuel storage rooms, server rooms, and cash handling areas.

- Detects unauthorized access attempts

- Generates real-time security alerts
- Maintains timestamped video logs for investigation and audits

Outcome: Stronger asset protection and reduced security risks.

8. Promotional Display Measurement

Measures customer engagement with promotional displays and campaign zones.

- Tracks footfall near campaigns
- Measures dwell time and engagement patterns
- Identifies peak interaction times and conversion trends

Outcome: Smarter marketing decisions and measurable promotional ROI.

9. Multi-Site Remote Monitoring

Provides centralized visibility across multiple fuel retail outlets through a unified dashboard.

- Monitors incidents, footfall, and operations across all sites
- Provides real-time alerts from any outlet
- Enables remote operational oversight for franchise operators

Outcome: Faster decisions and full operational visibility.

10. Incident Logging & Reporting

Automatically records and indexes incidents with associated timestamped video clips.

- Supports insurance claims and police investigations
- Generates audit-ready incident reports
- Provides searchable evidence archives

Outcome: Faster claim processing and stronger incident documentation.

Key Benefits for Fuel Retail Operators

Operational Area	Business Impact
Loss Prevention	Reduce drive-offs and fuel theft incidents
Forecourt Operations	Improve fueling efficiency and bay monitoring

Retail Operations	Reduce shrinkage and improve customer experience
Security Monitoring	Strengthen perimeter and restricted zone protection
Queue Management	Reduce waiting times and abandoned purchases
Staff Accountability	Improve shift coverage and operational discipline
Incident Management	Faster investigations and insurance claim support
Multi-Site Visibility	Centralized operational monitoring across outlets

KenVision enables fuel retail operators to transform existing CCTV infrastructure into an intelligent operational and security platform. By combining AI-powered analytics with real-time monitoring, fuel outlets become safer, more efficient, and better equipped to reduce losses while improving customer experience.